

**Precipitation.**—The average was 2.19 below the normal; greatest monthly, 12.08, at Protom; least monthly, 1.10, at Shelbina.—*Prof. Francis E. Nipher, Saint Louis, director.*

#### METEOROLOGICAL REPORT OF THE MISSOURI STATE BOARD OF AGRICULTURE.

**Temperature.**—Maximum, 98, at Protom, 7th; minimum, 27, at Adrian, 12th; greatest monthly range, 63, at Adrian; least monthly range, 42, at Cairo, Ill., and Steelville.

**Precipitation.**—Greatest monthly, 14.41, at Sarcoxie; least monthly, 1.75, at Saint Charles.—*Levi Chubbuck, Secretary of State Board of Agriculture, Columbia, director; A. L. McRae, Sergeant, Signal Corps, assistant.*

#### NEBRASKA.

The month has been one of extremes in temperature, early frosts, lack of rain, and considerable cloudiness.

**Temperature.**—The mean was 2.0 below the normal; maximum, 104, at Wilcox; minimum, 18, at Fort Niobrara.

**Precipitation.**—The rainfall varied from 0.00 to trace in the extreme west to 1.00 through the middle and northeast parts of the state; over the remainder of the state from 1.00 to 3.00 fell.—*Prof. Goodwin D. Swezey, Crete, director; G. A. Loveland, Sergeant, Signal Corps, assistant.*

#### NEW ENGLAND METEOROLOGICAL SOCIETY.

**Temperature.**—The average was 0.3 above the normal; maximum, 86, at Lowell, 5th; minimum, 20, at Berlin Mills, 25th; greatest monthly range, 62, at Lake Cochituate; least monthly range, 26, at Block Island.

**Precipitation.**—The average was 1.75 above the normal; greatest, 11.14, at Chicopee; least, 2.69, at Block Island.

**Wind.**—Prevailing direction, southwest.—*Prof. William H. Niles, Boston, Mass., president; Prof. Winslow Upton, Providence, R. I., secretary; J. Warren Smith, Private, Signal Corps, assistant.*

#### NEW JERSEY.

**Temperature.**—The mean was 0.9 below the normal; highest monthly mean, 68.5, at Bridgeton; lowest monthly mean, 60.8, at Newton; maximum, 91, at Woodbury, 5th; minimum, 33, at Madison, Tenafly, and Newton, 25th, and at Gillette, 30th; greatest local monthly range, 56, at Madison; least local monthly range, 26, at Ocean City.

**Precipitation.**—The average was 0.86 above the normal; greatest monthly, 8.61, at Egg Harbor City; least monthly, 3.60, at Ocean City.

**Wind.**—Prevailing direction, southwest.—*E. W. McGann, Sergeant, Signal Corps, New Brunswick, in charge.*

#### NEW YORK.

**Temperature.**—Maximum, 90, at Addison, 8th; minimum, 22, at Utica, 28th; greatest local monthly range, 65, at Hyndsville.

**Precipitation.**—Greatest monthly, 12.72, at South Canisteo; least monthly, 2.41, at Massena.

**Wind.**—Prevailing direction, southwest.—*Prof. E. A. Fuertes, Ithaca, director; R. M. Hardinge, Private, Signal Corps, assistant.*

#### NORTH CAROLINA.

The month was unusually damp and cloudy and unfavorable for the growth of crops, especially the maturing of cotton. Picking was greatly delayed.

**Temperature.**—The mean was 1.0 above the normal; maximum, 94, at Chapel Hill, 7th; minimum, 44, at Highlands, 17th, and at Mount Airy, 18th; greatest monthly range, 45, at Marion; least monthly range, 17, at Hatteras.

**Precipitation.**—The rainfall was heaviest in the southeastern part of the state. The average was 0.67 above the normal; greatest monthly, 10.77, at New Bern; least monthly, 1.94, at Lynchburg, Va.

**Wind.**—Prevailing direction, northeast.—*Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Sergeant, Signal Corps, assistant.*

#### NORTH AND SOUTH DAKOTA.

**Temperature.**—The mean was 1.2 above the normal; maximum, 97, at Milbank, S. Dak., 23d, and at Steele, N. Dak., 17th; minimum, 18, at Steele, N. Dak., 19th; greatest local monthly range, 79, at Steele, N. Dak.; least local monthly range, 53, at Sioux Falls, S. Dak.

**Precipitation.**—The average was about 0.45 below the normal; greatest monthly, 8.78, at Sioux Falls, S. Dak.; least monthly, 0.08, at Etta Mine, S. Dak.

**Wind.**—Prevailing direction, southeast.—*S. W. Glenn, Sergeant, Signal Corps, Huron, S. Dak., in charge.*

#### OHIO.

**Temperature.**—The mean of the northern section, the middle section, the southern section, and of the state was 1.6, 2.1, 0.7, and 1.4, respectively, below the average; maximum, 92, at Sandusky and Logan, 7th; minimum, 28, at Findlay, 29th.

**Precipitation.**—The rainfall was the largest September rainfall since the opening of the bureau, the average in the northern section, the middle section, the southern section, and the state being 1.49, 3.23, 1.97, and 2.23, respectively, above the normal; greatest monthly, 8.89, at Newcomerstown; least, 1.91, at Clarksville.

**Wind.**—Prevailing direction, southwest.—*Prof. B. F. Thomas, Columbus, director; Lieut. Charles E. Kilbourne, secretary; C. M. Strong, Sergeant, Signal Corps, assistant.*

#### OREGON.

**Temperature.**—The mean was 1.1 above the normal; maximum, 98, at Grant's Pass, 4th; minimum, 23, at Beulah, 12th.

**Precipitation.**—The average was 0.90 below the normal, except in Jackson, Lake, and Gilliam counties, where, owing to heavy rains on the 30th, it was above; generally less than 0.10 fell along the coast and in the Willamette Valley; in southern and eastern parts of the state from 0.11 to over 2.00 fell.

**Wind.**—Prevailing directions, north and northwest.—*Hon. H. E. Hayes, Master State Grange, Oswego, director; B. S. Pague, Sergeant, Signal Corps, assistant.*

#### PENNSYLVANIA.

**Temperature.**—The mean was 1.0 above the normal; maximum, 91, at Carlisle and Coatsville, 5th, and at McConnellsburgh, 7th; minimum, 25, at Derry, 25th; greatest local monthly range, 26, at Philipsburgh; least local monthly range, 14, at Erie.

**Precipitation.**—The average was 1.00 above the normal; greatest monthly, 8.54, at Ligonier; least monthly, 2.05, at South Eaton.

**Wind.**—Prevailing direction, northwest.—*Under direction of the Franklin Institute, Philadelphia; T. F. Townsend, Sergeant, Signal Corps, assistant.*

#### SOUTH CAROLINA.

**Temperature.**—Highest monthly mean, 77, at Chester; lowest monthly mean, 66.3, at Spartanburgh; maximum, 98, at Brewer Mine, 4th; minimum, 49, at Spartanburgh, 25th and Yorkville, 30th; greatest local monthly range, 48, at Brewer Mine; least local monthly range, 30, at Timmonsville.

**Precipitation.**—Greatest monthly, 13.68, at Port Royal; least monthly, 3.29, at Spartanburgh.

**Wind.**—Prevailing direction, northeast.—*Hon. A. P. Butler, Columbia, director.*

#### TENNESSEE.

The principal features of the month were the unusual rainfall and the large percentage of cloudiness.

**Temperature.**—The average was very near the normal for the last 8 years; maximum, 94, at Waynesborough, 5th; minimum, 44, at Clarksville, 14th; greatest monthly range, 48, at Waynesborough; least monthly range, 31, at Cog Hill and Lookout Mountain.

**Precipitation.**—The average was more than 2.00 in excess of the normal for the last 8 years, and was the greatest average during this period, except in 1889; greatest monthly, 9.07, at Memphis; least monthly, 1.40, at Cog Hill.

**Wind.**—Prevailing directions, south and northeast.—*J. D. Plunket, M. D., Nashville, director; H. C. Bate, Sergeant, Signal Corps, assistant.*

#### TEXAS.

**Temperature.**—The mean varied but little from the normal; maximum, 100, at Rio Grande City, 19th; minimum, 33, at Ochiltree, 80th; greatest local monthly range, 62, at Ochiltree; least local monthly range, 31, at Galveston, Hearne, and La Grange.

**Precipitation.**—The rainfall generally averaged about the normal; greatest monthly, 10.02, at La Grange; least monthly, 0.08, at Coldwater.—*D. D. Bryan, Galveston, director; I. M. Cline, Sergeant, Signal Corps, assistant.*

*Meteorological record of Army post surgeons, voluntary, and other co-operating observers, September, 1890.*

Stations.	Temperature. (Fahrenheit.)			Stations.	Temperature. (Fahrenheit.)		
	Max.	Min.	Mean		Max.	Min.	Mean
Alabama.	o	o	o	Arizona—Cont'd.	o	o	o
Bermuda *†.	89	56	72.5	Casa Grande .....	108	73	87.0
Camden .....	91	52	74.2	Chino .....	87	51	68.8
Carrollton .....	84	56	73.7	Cooley's t.....	80	40	59.6
Citronelle .....	95	53	77.4	Cottonwood .....	.....	.....	3.80
Columbianna's .....	91	54	72.3	Crittenden .....	.....	.....	2.60
Decatur (1) t.....	.....	.....	3.85	Dragoon t.....	.....	.....	2.48
Decatur (2) t.....	94	50	70.9	Don Cabazon t.....	.....	.....	1.36
Double Springs t.....	87	56	71.5	Dudleyville .....	.....	.....	0.90
Eufaula t.....	90	54	73.0	Eagle Pass* .....	58	69.4	1.76
Evergreen t.....	93	53	75.8	Farley's Camp .....	.....	84.0	....
Florence .....	92	50	72.5	Florence .....	105	60	82.6
Goodwater .....	91	62	78.8	Fort Apache .....	91	44	67.8
Greensborough .....	90	54	73.5	Fort Bowie .....	85	52	69.5
Jasper .....	86	55	72.3	Fort Grant .....	93	40	70.2
Livingston (1) t.....	87	51	72.1	Fort Huachuca .....	89	53	69.5
Livingston (2) t.....	88	52	73.3	Fort Lowell .....	101	54	80.0
Marion t.....	92	50	73.2	Fort McDowell .....	108	60	83.7
Mount Willing .....	88	60	76.0	Fort Verde .....	102	50	75.8
Mt. Vernon B'ks .....	95	49	74.2	Gila Bend (1)* .....	102	74	86.9
Opelika t.....	93	52	72.7	Gila Bend (2) .....	116	78	92.0
Pine Applef.....	97	53	75.6	Grand Central Mill .....	.....	.....	3.12
Selma (2) t.....	93	56	76.3	Holbrook t.....	89	43	66.2
Tuscaloosa (2) .....	88	48	71.3	Lochiel* .....	87	56	69.2
Union Springs .....	97	52	75.4	Maricopa .....	101	70	88.2
Uniontown .....	90	57	74.3	Mount Huachuca .....	84	51	68.8
Valley Head t.....	90	50	68.8	Natural Bridge* .....	.....	.....	3.37
Alaska.	.....	.....	.....	New River .....	103	35	79.2
Juneau .....	65	36	50.6	Oro .....	.....	.....	2.04
Killisquoo .....	69	36	50.5	Pantano .....	103	57	77.4
Ariz. Canal Co. dam.	105	66	85.4	Payson .....	.....	.....	2.04
Ash Canyon .....	.....	.....	2.04	San Carlos .....	.....	.....	0.80
Ash Springs* .....	63	71.2	6.46	San Simon .....	106	65	73.4
Benson .....	90	64	75.6	Show Low t.....	.....	.....	1.65
Bisbee t.....	85	54	67.2	Signal t.....	104	64	82.9
			1.73	Simmons .....	.....	.....	0.13

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Arizona—Cont'd.	o	o	o	Ins.	California—Cont'd.	o	o	o	Ins.
Strawberry	319	319	319	T.	Ione	54	72.7	68.0	Walnut Creek
Tempe	o	o	o	12	Iowa Hill	54	72.2	77.4	Westley
Tevison	72	89.4	89.4	10	Julian	54	71.1	77.4	Wheatland
Texas Hill	III	o	o	41	Keeler	60	77.4	80.0	Whittier
Tip Top	72	o	o	41	Keene	55	69.9	75.3	Williams
Tombstone	95	54	73.5	2.96	Kingsburgh	58	76.5	80.0	Willow (2)
Total Wreck	65	65	65	54	La Grange	55	70.6	76.8	Winters
Tucson (1)	99	60	80.5	1.44	La Grange	54	67.0	72.8	Woodland
Tucson (2)	96	79	89.6	1.15	Lathrop	55	68.7	72.8	Colorado
Walnut Grove	o	o	o	60	Laurel	48	66.3	73.8	Alvaf
Walnut Ranch	o	o	o	60	Lemoore	60	74.1	78.0	Abbott
Willcox*	97	66	75.6	1.97	Livermore	54	70.2	72.0	Alma
Wilcox	o	o	o	2.20	Livingston	56	78.3	84.9	Anherst
Williams	83f	39f	59.1f	2.87	Long Beach	60	68.7	71.5	Apishapa
Yuma	103	75	87.9	0.64	Los Angeles	60	73.6	76.6	Bonne
Whipple Barracks	92	45	67.2	0.96	Los Banos (2)	60	76.0	79.2	Box Elder
Woodruff	o	o	o	1.80	Los Gatos (1)	50	66.9	72.0	Brandon
Arkansas	o	o	o	5.40	Los Gatos (2)	44	65.6	70.9	Breckenridge
Arkansas City	52	71.9	72.1	5.40	Martinez	50	61.1	65.9	Brush
Camden	91	52	69.5	10.31	Menlo Park	47	64.9	69.9	Byers
Conway	90	50	69.5	9.60	Mojave	58	72.9	79.0	Canyon City
Dardenelle	o	o	o	70.9	Modesto	52	72.9	79.0	Castle Rock
Deavall's Bluff	92	49	70.9	5.35	Mono	60	74.9	79.0	Chromot
Forrest City	90	50	70.9	7.34	Montague	58	71.6	79.0	Climax
Fulton	o	o	o	3.31	Monterey	50	59.2	61.0	Como (near)
Harrisburgh	86	48	65.0	5.50	Monterey	47	59.5	61.0	Crook
Helena (1)	92	50	72.6	8.99	Montgomery	52	64.8	66.0	Cumbres
Helena (2)	92	50	69.9	12.62	Monterey (H. d. M.)	47	59.5	60.0	Deer Trail
Hot Springs	95	45	66.0	12.08	Napn.	18	61.0	65.0	Delta
Lead Hill	93	46	68.5	5.72	Newark	52	65.5	69.0	Dillon
Lonoke	94	54	72.9	5.72	Newhall	40	70.8	73.0	Eagle Farm
Malvern	90	58	72.0	o	Newman	60	79.3	81.3	Elkhorn
Newport (1)	o	o	o	5.56	Niles	52	64.8	67.0	First View
Newport (2)	91	47	68.4	7.25	Norwalk	57	73.1	77.0	Fort Collins
Osceola	90	46	68.0	5.54	Oakland (1)	48	61.2	65.8	Fort Crawford
Ozone	85	46	66.0	9.00	Oakland (2)	56	59.0	59.3	Fort Lewis
Pine Bluff	96	50	73.4	4.44	Ogilby	75	95.7	99.0	Fort Logan
Prescott	89	51	72.1	5.90	Ontario	58	78.6	81.8	Fort Morgan
Russellville	92	48	71.3	8.78	Pajaro	45	60.4	64.2	Fruita
Stuttgart	92	47	70.1	5.22	Paso Robles	48	67.6	69.5	Georgetown
Texarkana	96	48	74.0	4.31	Petaluma	51	64.2	68.0	Greenhorn
Washington	93	51	73.8	4.07	Placerville (1)	53	68.6	71.0	Hepzibah
Winslow	80	42	67.1	8.26	Placerville (2)	45	66.5	69.4	Hilliard
California	o	o	o	o	Pomona	55	74.2	78.0	Hopkinton
Alcade	101	60	76.0	1.60	Presidio of S. F.	40	58.6	60.0	Homestead
Alcatraz Island	74	45	56.8	T.	Puente	55	73.3	78.0	Hot Springs
Almaden	88	55	67.6	0.07	Ravena	52	75.0	79.9	Humid
Anaheim	95	68	73.4	0.29	Red Bluff	59	76.1	79.9	Hyatt
Angel Island	82	49	61.0	0.20	Redding	58	76.7	80.0	Idaho
Antioch	84	61	69.9	0.93	Riverside	49	69.6	71.7	Idaho Falls
Aptos	72	48	61.2	0.40	Rocklin	54	73.7	76.6	Idaho Falls
Athlone	104	57	74.0	1.61	Rumsey	60	74.2	77.4	Idaho Falls
Auburn	94	52	72.2	2.63	Sacramento (1)	43	62.2	65.0	Idaho Falls
Bakersfield	99	64	78.5	0.47	Sacramento (2)	57	69.5	72.9	Idaho Falls
Barstow	104	54	76.0	0.59	Salinas (1)	52	59.2	61.0	Idaho Falls
Belmont	88	54	64.7	0.70	Salinas (2)	52	60.8	62.5	Idaho Falls
Benicia Barracks	92	50	66.0	1.30	Salton	60	87.9	91.5	Idaho Falls
Berendo	108	57	76.2	2.00	Sanger Junction	59	80.0	83.5	Idaho Falls
Berkeley	83	49	59.2	0.25	San Ardo	52	61.8	64.0	Idaho Falls
Bishop Creek	98	53	73.2	0.69	San Diego B'ks	59	70.2	72.4	Idaho Falls
Borden	103	63	76.2	0.00	San Gabriel	60	74.3	76.0	Idaho Falls
Boulder Creek	100	31	60.1	0.30	San Jose	50	64.9	65.0	Idaho Falls
Brentwood	90	68	70.6	1.50	San Mateo	51	61.8	64.0	Idaho Falls
Brighton	98	58	72.6	1.10	San Miguel	50	66.6	67.0	Idaho Falls
Byron	94	56	72.3	1.63	San Pedro	62	73.4	76.0	Idaho Falls
Caliente	98	55	74.7	0.52	Santa Barbara (1)	52	66.5	67.7	Idaho Falls
Calistoga	96	48	65.1	0.10	Santa Barbara (2)	60	68.8	70.7	Idaho Falls
Castroville	74	59	62.2	0.59	Santa Clara	44	63.6	65.0	Idaho Falls
Centreville	94	56	68.0	0.45	Santa Cruz (1)	45	68.1	68.8	Idaho Falls
Chico	92	56	70.9	1.28	Santa Cruz (2)	41	61.0	63.0	Idaho Falls
Cisco	76	45	57.4	3.11	Santa Margarita	44	60.7	62.7	Idaho Falls
Colfax	94	56	73.1	2.75	Santa Maria	48	63.5	65.5	Idaho Falls
Colton	108	56	77.2	0.67	Santa Monica	60	69.9	70.0	Idaho Falls
Corning	95	61	78.5	0.78	Santa Paula	58	69.9	72.0	Idaho Falls
Crescent City	o	o	o	0.42	Santa Rosa	45	62.8	65.0	Idaho Falls
Davisville	96	48	70.7	6.22	Solma	61	75.8	79.5	Idaho Falls
Delta	97	48	67.8	1.00	Seven Palms	39	72.3	73.8	Idaho Falls
Downey	91	68	71.3	0.04	Shingle Springs	56	73.9	75.0	Idaho Falls
Dunnigan	96	58	75.1	0.64	Sims	49	69.3	71.4	Idaho Falls
Edgewood	85	43	62.4	1.05	Sisson	48	61.4	62.0	Idaho Falls
El Dorado	101	54	74.2	1.77	Soledad	48	63.3	65.5	Idaho Falls
Elmira	100	52	69.3	0.35	Soquel	48	63.6	65.0	Idaho Falls
El Verano	87	50	64.7	0.10	South Vallejo	48	59.8	60.0	Idaho Falls
Emigrant Gap	80	46	60.6	0.32	Spadra	54	71.9	74.0	Idaho Falls
Esparto	95	55	71.6	0.41	Steelst.	49	63.8	65.0	Idaho Falls
Evergreen	o	o	o	0.31	Summit	43	61.8	64.0	Idaho Falls
Farnington	102	58	72.3	0.63	Suisun City	54	68.0	69.3	Idaho Falls
Felton	98	50	72.3	0.35	Tehachapi	48	65.7	67.0	Idaho Falls
Fernando	104	59	72.7	0.36	Tehama	60	75.7	76.0	Idaho Falls
Florence	90	58	70.3	0.00	Templeton	48	68.3	69.0	Idaho Falls
Folsom	100	60	75.2	1.13	Towles	50	67.7	69.0	Idaho Falls
Fort Bidwell	85	36	61.2	1.00	Tracy	52	69.5	71.4	Idaho Falls
Fort Gaston	98	39	65.5	0.60	Traver	58	72.8	74.0	Idaho Falls
Fort Mason	76	49	58.6	0.12	Tropic	52	71.0	72.3	Idaho Falls
Fresno	104	59	80.4	1.00	Truckee (1)	42	56.6	58.0	Idaho Falls
Galt	96	55	70.6	0.83	Truckee (2)	42	62.1	65.0	Idaho Falls
Georgetown	89	50	69.4	2.81	Tulare	58	78.6	82.0	Idaho Falls
Gilroy	97	50	65.8	0.20	Upper Mattie	45	62.1	65.2	Idaho Falls
Girard	93	55	72.6	0.08	Vacaville (1)	56	72.6	74.0	Idaho Falls
Glen Ellen	95	43	62.5	0.06	Vacaville (2)	53	71.1	72.8	Idaho Falls
Goshen	104	60	77.8	0.80	Valley Springs	55	71.5	72.0	Idaho Falls
Grass Valley	o	o	o	2.09	Vina	58	75.9	80.5	Idaho Falls
Haywards	79	52	61.7	0.38	Volcano Springs	65	88.7	90.0	Idaho Falls
Hollister	90	48	62.5	0.45	Walla Walla Ck.	42	64.3	68.4	Idaho Falls
Hornbrook	92	48	67.0	0.00	Voluntown	31	61.3	64.9	Idaho Falls

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean			Max.	Min.	Mean	
California—Cont'd.	o	o	o	Ins.	Inns.	o	o	o	Ins.	Connecticut—Cont'd.	o	o	o	Ins.
Strawberry	96	54	72.7	T.	Walnut Creek	47	68.0	77.4	Waltonford	Wallingford	5.66	5.66	5.66	5.66
Tempe	93	54	72.2	2.29	Westley	63	71.6	77.4	Waterbury	Waterbury	4.98	4.98	4.98	4.98
Tevison	89	54	71.1	1.25	Wheatland	51	71.6	77.4	West Simsbury	West Simsbury	5.72	5.72	5.72	5.72
Texas Hill	95	60	77.4	0.40	Whittier	59	75.3	80.0	Delaware	Kirkwood	4.83	4.83	4.83	4.83
Tip Top	72	o	o	0.41	Williams	56	73.8	75.5	District of Columbia	Kirkwood	4.83	4.83	4.83	4.83
Tombstone	95	54	73.5											

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Illinois—Cont'd.	°	°	°	Ins.	Jewell—Cont'd.	°	°	°	Ins.
Palestine	91	37	61.5	5.38	Washington	90	34	63.2	2.05
Pana	92	45	65.3	4.66	Webster City	88	30	58.0	3.75
Peoria (1)†	93	40	64.1	2.12	West Bend†	87	34	57.4	3.58
Peoria (2)	93	40	64.1	1.50	Kansas.				
Philo	90	30	61.9	0.60	Abilene	90	42	65.6	1.00
Pontiac	94	30	62.2	0.35	Allison	98	32	62.1	0.62
Riley	88	35	57.9	0.87	Alton	100	32	65.6	1.07
Rockford	88	32	58.0	0.60	Bucklin				
Rock Island Ar'st.	90	42	63.8	3.40	Buffalo Park	93			
Rushville	93	38	60.4	3.64	Burr Oak	90	27		
Sandwich	85	35	65.0	2.15	Cawker City	90	30		
South Evanston	80	36		1.49	Colwater	92	35		
Sycamore*	88	30	57.4	1.22	Collyer	101			
Warsaw†					Columbus	97	30		
Watseka	91	32	60.0	2.08	Concordia	97	30		
White Hall*	94	38	65.7	2.04	Conway	90	36		
Winnebago	93	40	61.1	0.50	Cunningham	104	32		
Indiana.					Downs				
Angola	90	35	61.7	6.52	Eels	92	36		
Butlerville*	87	43	63.9	3.79	Elk Falls†	96	38		
Cannelton*	91	35			Emporia	97	40		
Columbia City	86	35	60.4	5.07	Englewood*	88	41		
Columbus	88	41	62.8	3.36	Eureka Ranch	95	35		
Connersville	86	42	59.5	4.27	Ft. Leavenworth (1)	104	31		
Crandall	91	37	65.0	3.75	Ft. Leavenworth (2)	87	36		
De Gonia Springs	87	43	66.1	2.87	Ft. Leavenworth (2)	84	38		
Delphi	88	33	57.6	2.18	Fox Riley	92	34		
Farmland	88	39	62.1	9.02	Fremont	101	29		
Franklin	89	41	62.0	4.80	Gibson	98	32		
Huntingburg	92	44	65.9	2.21	Globe*	90	37		
Huntington†					Gove City†	105	40		
Jeffersonville	89	43	66.2	2.44	Grainfield	96			
Le Fayette	89	36	61.9	2.30	Grenola	95	40		
Logansport (1)					Grinnell	96			
Logansport (2)	87	42	59.7	3.24	Halstead	92	32		
Marengo	89	42	67.2	4.47	Havensville*	93	29		
Mauzy*	40	58.3	3.98	Horton	93	37			
Mount Vernon (1)†				Independence	94	36			
Mount Vernon (2)				Junction City					
Muncie	88	42	62.1	5.61	Kansas City	97	35		
Point Isabel*	85	31	56.8	7.30	Kellogg	101	32		
Princeton	92	42	65.4	3.65	Kingman†				
Richmond	88	38	61.4	4.25	Kirwin†				
Rockville	86	36	61.8	2.22	Le Crosse	98	38		
Rushville†				La Harpe*	49	43			
Seymour	85	38	66.6	2.07	Lakin	103	20		
Sunman†	86	39	63.4	2.44	Larned	96	29		
Terre Haute	88	38	63.5	2.07	Lawrence	90	37		
Valparaiso	96	50	71.0	1.59	Lebo	92	33		
Vevay	91	38	66.1	2.81	Lincoln	86	20		
Vincennes				Luray	86	20			
Worthington	87	42	61.4	5.57	Macksville*	99	30		
Indian Territory.				Manhattan (1)†	95	39			
Eufaula				Manhattan (2)	98	32			
Fort Gibson				Manhattan (3)*	98	32			
Fort Reno	90	48	70.5	5.77	Mankato*	90	39		
Fort Sill	93	36	69.4	3.98	Marmaton	89	39		
Fort Supply	94	42	70.4	1.29	McAllaster				
Guthrie*	92	46	71.4	4.35	Minneapolis	92	36		
Headland	92	42	72.4	4.79	Monument	100	41		
Tulsa				Morse*	88	35			
Iowa.				Norton	90	31			
Afton	86	38	61.3	2.30	Oakley	102			
Alta (1)*	90	29	60.0	3.44	Oberlin†				
Alta (2)	88	32	60.1	4.65	Offerle	93	32		
Amana†	89	30	59.1	1.22	Ogallala	90	38		
Ames	89	35	59.9	3.20	Oswego	91	37		
Atlantic	94	23	55.0	1.94	Page City	105	38		
Bancroft	88	32	59.3	4.67	Quinter	98	45		
Belle Plaine*	88	32	57.4	2.32	Rome	98	36		
Blakeville*	92	36	62.3	3.36	Salina*	91	40		
Carroll†	92	27	59.2	1.36	Scott City	98	39		
Carson	96	34	61.8	3.23	Sedan*	98	39		
Cedar Rapids†	87	32	59.6	2.90	Seneca*	88	30		
Clarinda*	90	34	61.7	2.62	Sharon Springs	96	42		
Clinton	92	33	58.8	1.97	Shields	103	39		
Cresco	86	28	55.8	3.21	Springvale				
Des Moines	89	30	61.1	2.07	Toronto				
Eagle Grove*	88	32	60.9	4.85	Tribunet	98	36		
Fayette†	88	25	56.2	3.62	Wakefield*	97			
Fort Madison*	90	39	62.6	2.07	Wa Keeney	98	48		
Glenwood (1)	96	32	64.7	2.64	Wallace (1)	100	48		
Greenfield*	89	30	59.5	2.12	Wallace (2)	102	44		
Grinnell†	88	34	60.2	1.44	Wellington	98	37		
Hampton	87	28	55.1	3.19	Weskan	95	47		
Humboldt*	87	30	58.3	4.28	Wilson	92	39		
Independence*	82	41	58.6	4.48	Yates Centre	100	48		
Iowa City	82	37	58.8	1.44	Kentucky.				
Larrabee				Bowling Green†	94	40			
Le Claire†	94	31	63.8	1.78	Burnside†	88			
Logan†	94	31	60.1	2.33	Caddo†	88			
Manson*	88	30	56.6	4.35	Catlettaburgh†				
Maquoketa*	91	33	57.4	2.44	Canton*	89			
McCainsland*	88	33	58.0	2.90	Central City†	86			
Monticello*	87	31	58.2	4.05	Earlington	89	44		
Mount Pleasant†	85	42	61.5	1.65	Eddyville†				
Mount Vernon*	88	33	61.3	0.97	Edmonton	85	47		
Muscataine (2)	88	32	58.7	2.52	Falmouth (1)†	84			
Osage*	88	32	53.6	3.66	Frankfort (1)†	91			
Oskaloosa (1)*	87	38	60.2	2.61	Frankfort (2)	91	44		
Panama m.	86	36	59.1	0.61	Franklin†	90	49		
Sac City	80	28	56.7	1.10	Greensburg†	88			
Storm Lake*	86	38	59.8	2.82	Harrodsburg†	95	38		
Stilson	89	27	57.0	4.40	Louisat				
Vinton*	87	29	57.3	2.05	Louisat				

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Kentucky—Cont'd.	°	°	°	Ins.	Kentucky—Cont'd.	°	°	°	Ins.
Mount Sterling†	86	44	65.5	2.05	Mount Sterling†	86	44	65.5	2.05
Newport Barracks	89	41	65.0	3.25	Newport Barracks	89	41	65.0	3.25
Paducah†					Paducah†				
Pelville†	90	40	66.2	2.19	Pelville†	90	40	66.2	2.19
Princeton†	91	40	66.5	4.81	Princeton†	91	40	66.5	4.81
Shelbyville†	92	39	65.6	1.60	Shelbyville†	92	39	65.6	1.60
Williamsburg†					Williamsburg†				
Louisiana.					Louisiana.				
Abbeville*	89	53	77.4	6.26	Abbeville*	89	53	77.4	6.26
Alexandriat	96	46	70.6	3.44	Alexandriat	96	46	70.6	3.44
Amitié City†	95	54	76.4	6.17	Amitié City†	95	54	76.4	6.17
Baton Rouge	94	50	76.3	3.00	Baton Rouge	94	50	76.3	3.00
Cheneyville	92	47	74.8	3.88	Cheneyville	92	47	74.8	3.88
Clinton d.	90	50	75.0	3.44	Clinton d.	90	50	75.0	3.44
Couchatta (1)†	96	46	74.4	6.06	Couchatta (1)†	96	46	74.4	6.06
Couchatta (2)	94	46	74.4	6.06	Couchatta (2)	94	46	74.4	6.06
Douglas	97	51	77.5	4.79	Douglas	97	51	77.5	4.79
Farmerville	90	55	79.9	2.87	Farmerville	90	55	79.9	2.87
Faribault	96	41	75.1	5.41	Faribault	96	41	75.1	5.41
Farmington*	76	38	59.2	4.25	Farmington*	76	38	59.2	4.25
Farmville	80	33	60.8	4.45	Farmville	80	33	60.8	4.45
Fayetteville	76	35	57.7	3.91	Fayetteville	76	35	57.7	3.91
Fenville	75	31	57.6	4.42	Fenville	75	31	57.6	4.42
Fewellsburg	84	41	65.7	5.51	Fewellsburg	84	41	65.7	5.51
Fewellsburg	84	41	66.0	3.49	Fewellsburg	84	41	66.0	3.49
Fewellsburg	85	39	63.1	5.95	Fewellsburg	85	39	63.1	5.95
Fewellsburg	85	39	63.1	5.95	Fewellsburg	85	39	63.1	5.95
Fewellsburg	85	39	63.1	5					

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Michigan—Cont'd.	o	o	o	Ins.	Missouri—Cont'd.	o	o	o	Ins.
Madison	86	36	59.0	2.90	Brunswick	87	34	62.9	5.50
Manton	83	26	55.7	0.94	Carrollton	87	38	61.7	2.08
Marshall	88	31	57.9	2.16	Cassville	88	35	64.9	6.77
May	92	36	58.0	1.80	Centreville	90	35	60.1	8.07
Montague	80	30	57.0	1.27	Conception	88	36	60.1	2.70
Mottville	90	34	59.4	3.73	Concordia	90	36	60.1	2.12
Noble	88	34	59.4	4.02	Dadeville	88	45	67.4	5.77
North Aurelius	88	34	59.4	2.52	Darksville	82	32	61.0	2.46
North Marshall	82	31	57.1	2.19	Eldon	90	40	65.7	6.63
Northport	82	31	57.1	1.20	Excelsior Springs	88	32	60.9	5.24
Olivet	86	34	56.8	1.36	Fayette	90	36	63.6	2.35
Otsego	90	30	58.9	2.60	Glasgow	89	36	62.7	4.48
Ovid	90	31	57.4	1.45	Glenwood	89	32	65.0	5.20
Parkville	84	36	59.2	3.59	Grand Pass	90	37	63.4	2.17
Paw Paw	90	29	60.0	3.14	Hannibal	91	38	62.5	2.50
Pontiac	82	42	58.9	2.35	Harrisonville	86	38	63.5	3.53
Pulaski	86	34	56.0	2.93	Hermann	90	43	64.9	2.98
Rawsonville	86	34	59.1	1.65	Ironton	88	45	64.9	8.40
Romeo	74	37	56.4	1.38	Jefferson Barracks	92	38	65.0	2.40
Roscommon	85	19	54.6	0.93	Jerome	90	32	63.5	4.65
Saint Ignace	83	30	54.4	1.01	Kansas City	90	36	64.6	3.98
Saint John's	91	31	58.4	1.76	Lamar	88	31	64.0	5.78
Sand Beach	86	33	56.6	0.82	Lebanon	86	40	65.4	5.86
Standish	89	28	57.9	0.21	Louisiana Bridge	88	32	63.5	4.65
Stanton	88	29	56.9	1.09	Marshall	90	38	62.9	2.36
Thornville	90	35	58.2	2.43	Marshfield	89	45	64.0	2.56
Vandalia	84	36	59.2	2.55	Marina	89	45	64.8	3.53
Vienna	84	37	56.7	2.00	New Haven	95	43	65.1	2.30
Washington	86	32	58.0	1.61	Oak Ridge	96	45	66.3	5.90
Weldon Creek	85	24	56.9	1.52	Oregon	92	35	63.0	3.53
West Branch	86	27	56.1	1.25	Pickering	90	30	52.8	1.95
White Pigeon	86	30	56.7	4.72	Platte River	92	32	62.8	3.03
Williamston	84	35	59.5	1.85	Princeton	90	34	64.5	2.35
Ypsilanti	82	32	55.5	2.19	Saint Charles (1)	90	37	66.5	2.10
Ypsilanti (2)	85	37	56.6	1.88	Saint Charles (2)	90	37	66.5	3.12
Minnesota	.....	.....	.....	.....	Saint Joseph	89	39	64.2	14.41
Alexandria	.....	.....	.....	.....	Sedalia	89	37	64.6	2.71
Crookston	85	29	52.6	2.20	Shelby	82	17	52.0	2.60
Farmington	80	32	56.6	4.00	Steelville	82	40	62.2	3.95
Fergus Falls	.....	.....	.....	.....	Stellida	88	37	64.2	2.14
Fort Ripley	.....	.....	.....	.....	Willow Springs	90	42	64.2	6.83
For Snelling	84	30	56.7	3.32	Leech Lake	88	37	64.7	2.14
Grand Meadow	89	29	53.7	2.69	Le Sueur	85	42	64.7	2.45
L. Winnibigoshish	78	31	52.9	4.74	Marshall	83	33	59.7	1.16
Monteagle	78	25	52.4	3.44	Montana	84	33	58.2	2.20
Morris	87	31	56.7	1.53	Blackfeet Agency	80	10	50.8	3.41
Northfield	87	28	56.7	3.25	Camp Poplar River	92	29	56.5	1.81
Ortonville	80	26	53.2	1.90	Choteau	85	24	54.0	2.44
Pine River	80	26	53.2	1.90	Custer	86	26	55.6	1.56
Pokegama Falls	81	24	50.5	3.91	Fort Assiniboine	86	25	55.6	1.87
Redwood Falls	.....	.....	.....	Fort Custer	88	29	58.4	1.72	
Rolling Green	84	31	58.1	1.69	Fort Keogh	88	29	55.6	2.12
Saint Charles	85	31	55.8	3.97	Fort Logan	82	17	51.4	0.85
Sheldon	82	32	54.0	4.26	Fort Missoula	87	25	55.6	0.76
Trace	.....	.....	.....	Fort Shaw	88	24	55.6	1.40	
Mississippi	.....	.....	.....	Glendale	96	31	60.2	1.52	
Aberdeen	88	48	69.9	5.46	Martinsdale	80	30	55.5	1.06
Agricultural College	87	52	70.3	4.00	Powder River	93	26	57.8	0.83
Batesville	92	51	71.6	4.00	Nebraska	.....	.....	.....	.....
Bay Saint Louis	88	60	78.6	1.35	Alliance	93	20	58.7	0.09
Booneville	89	44	70.0	8.35	Anesley	97	24	62.3	1.10
Brookhaven	86	50	75.2	3.02	Ashland	94	30	60.5	1.51
Canton	88	53	73.4	5.31	Bassett	100	31	62.3	0.23
Columbus (1)	94	52	75.2	8.06	Custer	.....	.....	.....	.....
Columbus (2)	95	50	75.0	9.58	Fort Assiniboine	86	25	55.6	1.87
Corinth	90	50	70.6	12.57	Fort Custer	88	29	58.4	1.72
Edwards	92	52	75.6	6.17	Fort Keogh	88	29	55.6	2.12
Fayette	91	53	74.4	2.86	Fort Logan	82	17	51.4	0.85
Greenville	89	54	73.7	4.94	Fort Missoula	87	25	55.6	0.76
Hattiesburgh	91	57	77.5	2.70	Fort Shaw	88	24	55.6	1.40
Hazlehurst	93	47	74.6	4.36	Glendale	96	31	60.2	1.52
Hernando	86	52	66.8	5.06	Martinsdale	80	30	55.5	1.06
Holly Springs (1)	86	52	72.7	8.93	Powder River	93	26	57.8	0.83
Holly Springs (2)	89	46	69.9	8.65	Nebraska	.....	.....	.....	.....
Jackson	92	50	75.5	3.17	Littleton	78	23	53.7	4.03
Kosciusko	88	50	72.5	7.80	Manchester	81	34	60.9	5.09
Lake	89	50	71.6	1.39	Mine Falls	82	20	54.4	2.86
Logtown	90	54	76.8	5.97	Nashua	82	30	60.9	6.01
Louisville	96	48	73.8	4.59	Newton	82	30	60.5	3.14
Macon (2)	90	40	71.8	4.12	North Conway	80	29	57.8	5.24
Moss Point	92	54	78.8	6.03	North Sutton	42	57.2	5.04	4.04
Natchez	92	53	75.5	3.47	Office	.....	.....	.....	.....
Okolona	92	50	74.2	10.26	Pennington	84	21	56.1	2.04
Palo Alto	89	51	71.8	8.84	Perkins	82	17	51.4	0.34
Pearlington	89	57	76.9	3.07	Platte River	82	17	51.4	0.34
Port Gibson	94	52	74.4	4.12	Portland	82	17	51.4	0.34
Pontotoc	87	52	70.0	9.41	Princeton	82	17	51.4	0.34
Biensi	90	54	72.6	8.69	Quincy	82	17	51.4	0.34
Vaiden	98	51	73.1	4.17	Redwood	82	17	51.4	0.34
Washington	91	52	74.8	3.39	Richmond	82	17	51.4	0.34
Water Valley	94	54	73.6	6.73	Riverside	82	17	51.4	0.34
Waynesboro (1)	90	51	73.8	3.72	Roxbury	82	17	51.4	0.34
Waynesboro (2)	92	55	75.8	3.74	Rutherford	82	17	51.4	0.34
West Point	85	54	73.5	6.26	Shelby	82	17	51.4	0.34
Yazoo City	.....	.....	.....	Sioux City	82	17	51.4	0.34	
Missouri	.....	.....	.....	South Bend	82	17	51.4	0.34	
Adrian	90	27	60.1	3.86	Taylor	82	17	51.4	0.34
Appleton City	88	36	64.4	4.24	Telegraph	82	17	51.4	0.34
Austin	88	40	65.4	4.65	Trinity	82	17	51.4	0.34
Paxton	.....	.....	.....	Waukegan	82	17	51.4	0.34	

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Nebraska—Cont'd.	o	o	o	Ins.	Plattsburgh	87	34	60.1	3.85
Brickville	94	24	60.1	0.86	Riverton	94	24	60.1	0.71
Sargent	95	30	69.5	1.18	Weybridge	94	36	60.3	0.32
Seward	95	29	59.4	0.99	Weeping Water	95	29	64.6	3.62
Syracuse	94	40	63.3	2.47	West Hill	91	41	64.6	3.62
Tecumseh	90	32	61.8	2.68	West Point	90	32	61.8	1.15
Tekamah	95	30	59.5	1.18	Wilcox	104	33	62.2	1.65
Wallace	94	36	60.3	0.76	Whitman	90	28	60.0	0.66
Winnipeg	92	45	63.4	2.17	York	90	32	62.2	0.66
Nevada	.....	.....	.....	.....	.....	.....	.....	.....	.....
Adams Centre	92	44	67.4	3.52	.....	.....	.....	.....	.....
Adelphi Academy	84	46	65.8	7.28	.....	.....	.....	.....	.....
Addison	90	34	60.8	7.22	.....	.....	.....	.....	.....
Afton	.....	.....	.....	.....	.....	.....	.....	.....	.....
Akron	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alabama	87	30	58.8	5.32	.....	.....	.....	.....	.....
Albion	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alfred Centre	84	29	56.1	9.47	.....	.....	.....	.....	.....
Angelica	84	27	55.9	8.72	.....	.....	.....</td		

*Meteorological record of voluntary observers, &c.—Continued.*

Stations.	Temperature. (Fahrenheit.).			Precip'n.	Stations.	Temperature. (Fahrenheit.).							
	Max.	Min.	Mean			Max.	Min.	Mean					
New York—Cont'd.	c	o	o	Inz.	Ohio—Cont'd.	o	o	o					
Peekskill †.	89	35	60.5	4.66	Marietta (2).....	87	42	64.4					
Pendleton Centre*.	85	32	57.5	5.01	Marion.....	.....	.....	8.8					
Perry City.....	83	28	57.2	6.65	McConnelsville.....	89	38	64.1					
Pine City.....	.....	.....	.....	Napoleon †.....	88	37	60.6						
Plattsburgh.....	79	35	57.4	4.86	New Alexandria.....	84	35	62.1					
Plattsburgh B'ks	86	33	57.2	2.87	New Comerstown.....	89	35	60.6					
Port Jervis.....	81	32	58.3	4.82	North Lewisburgh.....	91	38	63.9					
Potsdam*.	82	29	55.8	4.41	Oberlin.....	86	38	60.6					
Poughkeepsie.....	84	30	60.8	3.52	O. S. University †.....	87	36	61.4					
Quaker Street†.	78	30	56.3	8.11	Orangeville.....	87	34	59.7					
Queensbury.....	.....	.....	.....	Pomeroy.....	88	38	65.9						
Rome.....	82	30	56.9	8.59	Portsmouth (1)†.	.....	.....	4.1					
Watervliet Arsenal	81	43	64.0	6.53	Portsmouth (2)†.	88	46	65.3					
Batauket.....	81	43	64.0	12.72	Shiloh.....	89	36	59.3					
South Cuniesto.....	86	28	56.0	.....	Springborough†.	.....	.....	4.3					
S. E. Reservoir.....	.....	.....	.....	Tiffin.....	86	34	60.3						
South Kortright†.	27	56.4	5.64	Upper Sandusky.....	84	37	60.9						
Turin*.	82	31	56.0	4.83	Vienna*.....	87	37	60.2					
Utica.....	84	22	58.8	8.27	Wapakoneta.....	88	36	60.7					
Wappinger's Falls.....	.....	.....	.....	Waupeson.....	88	34	59.1						
Watervliet Arsenal	81	32	60.2	7.75	Waverly.....	92	46	66.6					
Wedgewood.....	88	31	57.5	6.80	Waynesville.....	85	46	60.6					
West Point.....	86	35	61.2	6.80	Westerville.....	84	36	60.3					
White Plains.....	80	42	62.9	2.90	West Milton*.....	88	40	65.6					
Willets Point.....	85	47	64.7	5.43	Weymouth.....	96	37	60.2					
<i>North Carolina.</i>													
Asheville (1).....	.....	.....	.....	Wheeler.....	.....	.....	4.26						
Asheville (2).....	86	49	65.6	3.86	Wooster†.....	88	38	59.6					
Bryson City.....	.....	.....	.....	Yellow Springs†.	85	39	59.7						
Chapel Hill.....	94	52	70.0	4.83	Youngstown.....	85	34	61.2					
Cleat Creek.....	87	52	69.6	6.35	Zanesville.....	.....	.....	7.33					
Currituck Inlet.....	.....	.....	.....	<i>Oregon.</i>									
Douglas †.....	91	48	70.6	3.25	Albany.....	91	42	61.1					
Fayetteville.....	90	54	73.2	3.12	Ashland (1).....	84	45	62.1					
Goldsborough.....	91	55	73.4	4.17	Bandon*.....	72	44	55.5					
Henderonville.....	76	49	62.1	2.28	Beulah.....	90	23	55.8					
Highlands.....	76	44	61.2	8.42	East Portland.....	83	36	.....					
Lenoir*.....	86	53	67.9	7.20	Eola.....	87	41	60.6					
Lumberton.....	95	54	73.6	4.67	Gold Beach.....	80	39	56.6					
Marion.....	94	49	68.9	3.52	Grant's Pass.....	98	34	60.7					
Morganton*.....	86	51	68.3	5.02	Happy Valley.....	89	27	55.6					
Mount Airy†.....	88	44	68.9	6.79	Heppner†.....	90	28	60.9					
Mount Holly†.....	.....	.....	.....	Joseph.....	85	26	55.8						
Mount Pleasant.....	90	52	69.4	.....	Lakeview.....	92	39	66.0d					
Murphy.....	.....	.....	6.98	McMinnville.....	93d	30d	60.8d						
New Bern†.....	90	54	72.8	6.77	Mount Angel.....	86	40	60.5					
Oak Ridge†.....	88	47	68.3	6.29	Siskiyou.....	80	45	60.6					
Pittsburgh†.....	88	51	69.0	4.00	Tillamook.....	75	40	56.8					
Raleigh*.....	91	54	72.0	1.75	<i>Pennsylvania.</i>								
Salisbury.....	85	51	71.6	2.60	Allegheny Arsenal.....	91	36	64.7					
Smithfield.....	91	53	71.4	2.45	Altoona.....	87	35	64.0					
Soapstone Mount*.	.....	50	68.5	6.25	Aqueduct*.....	93	40	64.6					
Southport.....	86	58	75.0	8.30	Bethlehem.....	86	34	65.0					
Wadesborough†.	88	48	69.9	4.39	Blooming Grove*.	88	30	67.0					
Washington.....	92	56	74.3	2.91	Blue Knob*.....	87	31	59.3					
Weldon*.....	92	51	70.8	3.39	Brookville.....	.....	.....	5.47					
Willeyton†.....	89	54	71.3	5.05	Browns Lock.....	.....	.....	2.54					
<i>North Dakota.</i>													
Davenport†.....	90	39	55.1	2.73	Carlisle.....	91	32	65.4					
Fort A. Lincoln.....	89	27	58.1	0.85	Catawissa†.....	85	36	62.0					
Fort Buford.....	90	30	56.4	2.04	Charlevoile.....	84	29	60.6					
Fort Pembina.....	84	26	54.1	3.89	Clarion (1)†.....	.....	.....	6.87					
Fort Totten.....	87	30	54.9	0.80	Coatesville†.....	91	35	62.5					
Fort Yates.....	97	27	59.1	0.68	Columbus.....	90	30	59.8					
Gallatin†.....	90	28	54.7	1.89	Confluence†.....	.....	.....	5.84					
Kelso.....	85	27	54.2	1.49	Coopersburg.....	87	38	62.9					
Napoleon.....	87	22	55.7	1.02	Corry.....	90	37	54.7					
New England City*.	87	20	55.0	0.55	Driftston.....	81	35	58.7					
Steele*.....	97	18	57.4	0.34	Doylestown.....	.....	.....	3.55					
Wahpeton*.....	89	20	59.5	3.32	Duberry.....	82	25	56.4					
Wild Rice*.	.....	32	51.3	2.09	Engle's Mere.....	79	34	59.9					
<i>Ohio.</i>													
Akron.....	86	38	60.6	6.56	Edinborough*.....	83	34	58.8					
Ashland*.....	88	40	63.0	4.53	Emporium.....	84	32	62.0					
Athens.....	88	41	63.4	6.46	Forks of Neshaminy*.	84	36	64.5					
Bangorville.....	86	35	59.8	5.29	Franklin*.....	84	32	57.7					
Bellevue*.....	.....	.....	2.53	Frankford Arsenal.....	89	40	66.8						
Benton*.....	86	35	59.6	3.93	Frederick.....	.....	.....	3.35					
Caledonia†.....	.....	.....	7.48	Freeport†.....	.....	.....	5.05						
Canton.....	86	36	61.4	5.38	Germantown.....	86	44	65.1					
Delina.....	84	38	61.8	4.80	Gettysburg†.....	84	37	61.4					
Circleville (1)†.	.....	.....	3.02	Girardville*.....	84	36	61.4						
Circleville (2).....	.....	.....	3.29	Grampian Hills.....	84	34	59.6						
Clarksville.....	87	39	62.5	1.91	Greenvrough†.....	87	35	60.9					
Cleveland.....	87	41	60.5	5.52	Greenville.....	87	35	62.0					
Columbus Barracks	88	34	63.1	7.88	Hamburg.....	87	35	61.9					
Dayton.....	88	39	63.4	7.37	Hollidaysburgh.....	89	29	62.0					
Demos.....	86	38	61.6	8.83	Honesdale.....	82	32	59.8					
Ellsworth.....	.....	.....	6.34	Huntingdon.....	88	31	62.4						
Endray.....	90	39	62.4	4.02	Indiana.....	84	36	61.2					
Garrettsville.....	88	33	59.5	2.67	Johnstown†.....	84	36	63.5					
Georgetown.....	88	33	57.7	4.33	Kennett Square.....	87	34	59.8					
Granville.....	86	37	61.6	7.33	Kilmers*.....	90	40	65.4					
Iratiot*.....	85	40	62.8	7.28	Lancaster.....	79	30	59.1					
Greenville†.....	84	38	60.4	4.52	Lansdale*.....	.....	.....	2.67					
Hanging Rock.....	90	40	63.9	4.12	Le Roy*.....	84	32	61.2					
Hiram.....	86	37	59.4	4.67	Lewishburg.....	88	34	63.2					
Indus.....	.....	.....	5.31	Ligonier*.....	87	30	64.0						
Jacksonborough	91	40	64.9	3.40	Lock Haven*.....	90	33	62.1					
Kenton*.....	87	35	60.2	6.59	Lynnhport*.....	87	30	63.1					
Elipsie*.....	89	34	61.3	2.88	Mahoning†.....	87	31	62.4					
Ogan*.....	92	38	62.7	8.44	Mauch Chunk*.....	87	31	64.4					
Orustown†.....	88	31	59.1	5.94	McConnellsburgh.....	91	35	63.1					
Fansfield†.....	.....	.....	5.61	Meadville (2).....	84	35	57.9						

*Meteorological record of voluntary observers, &c.—Continued.*

*Meteorological record of voluntary observers, &c.—Continued.*

*Received too late for publication in August, 1890.*

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Alaska. Killisnoo .....	0	0	0		Ina. 1.95	California—Cont'd. Tracy .....	0	0	Ins.
Killisnoo .....	70	40	55.8		Tropicoo .....	97	60	73.6	0.00
Arizona. Dragoon Summit .....	89	61	77.4	2.13	Williams .....	98	60	74.8	0.00
Dudleyville .....	.....	.....	.....	4.07	Willow (1) m. Willow (2) .....	102	65	82.5	T.
Gila Bend (2) .....	110	82	94.3	1.05	Colorado .....	101	54	73.3	0.00
Texas Hill .....	114	75	94.7	0.85	Beaver Creek .....	104	40	73.5	0.00
Tucson (2) .....	104	70	90.4	5.67	Connecticut .....				1.36
Whipple Barracks .....	90	50	70.4	4.14	Hartford (1) .....	90	52	70.9	.....
Wood Cañon .....	.....	.....	.....	3.63	Georgia .....				5.10
Yuma .....	103	82	90.3	1.67	Iowa .....				
California.					Clinton .....	101	45	68.6	3.12
Beaumont .....	97	60	73.5	0.15	Nevada .....				
Bishop Creek .....	103	62	81.3	0.50	Hot Springs (1) .....	99	62	76.0	.....
Boca .....	92	28	62.1	0.00	Oregon .....				
Borden .....	106	65	80.0	0.00	Ashland (1) .....	86	50	68.7	0.82
Colton .....	108	56	79.4	0.06	Pennsylvania .....				
Delano .....	105	62	84.5	0.00	Kilmers .....	92	53	72.9	7.24
Monterey (H del M) .....	82	49	61.5	0.00	South Carolina .....				
Dunnigan .....	106	63	83.2	0.00	Branchville .....	94	56	76.8	.....
Edgewood .....	101	61	79.3	0.45	Utah .....				
Emigrant Gap .....	86	52	67.4	0.00	Corinne .....	98	62	76.7	0.20
Elone .....	100	60	73.7	0.00	Virginia .....				
Lathrop .....	99	60	74.2	0.00	Bodford City* .....	61	72.8	2.77	
Meredoc .....	106	53	74.7	0.00	Wisconsin .....				
Milton (near) .....	98	59	77.7	0.00	Beloit .....	96	43	70.9	3.98
Monson .....	103	68	85.9	0.35	New Brunswick .....				
Montague .....	98	62	80.9	0.00	Stint John .....	77	49	61.8	7.22
Mount Hamilton .....	88	54	68.9	0.00	Mexico .....				
Newhall .....	107	45	76.4	0.00	Topobampo* .....	90	80	84.4	5.10
Newman .....	108	72	89.2	0.00	Colony Surinam, S.A. .....				
National City .....	104	52	72.5	0.07	Burnside-Coronie .....	92	71	79.0	13.94
Orland .....	110	57	82.6	0.00	Costa Rica .....				
Sacramento (2) .....	90	59	73.1	0.00	Grand Turk Island .....	85	82	83.5	7.64
Summit .....	82	50	61.8	0.00					

Letters of the alphabet denote the number of days missing from the record, thus:  
the letter c indicates three days missing, etc., etc.

\* Extremes of temperature from observed readings. † Signal Service instruments.

One observation daily at 10 a. m. ¶ Too low owing to defective instrument.  
Corrections and changes: Pittsburgh, N. C., August, 1890, should be Pittsborough;

Corrections and changes: Pittsburgh, Pa., name changed to Allegheny; Bermuda, Ala., August, 1890, total precipitation should be 5.01 instead of 2.31; Rock Island Arsenal, Ill., August, 1890, minimum temperature should be 49, instead of 34, mean temperature should be 71.1, instead of 63.6; Boston, Mass., August, 1890, total precipitation should be 3.00, instead of 2.70, strike out maximum, minimum, and mean temperature; Liberty, Va., name changed to Bedford City; Wesley, Iowa, name changed to Stilson; Tuscarora, Pa., name changed to Kilmor; Tequisquite, N. Mex., named changed to Albert.

Mean temperature (degrees Fahr.) observed at Fort Brooke, Fla., by U. S.  
Army surgeons and voluntary observers.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
1825 ...	60.4	64.6	67.4	72.7	78.7	80.7	80.7	79.0	78.5	76.9	70.5	58.7	72.39
1826 ...	57.3	60.5	72.9	74.8	79.7	79.1	81.6	80.1	81.6	76.4	66.8	60.2	73.32
1827 ...	56.9	69.7	70.5	75.4	76.0	81.4	82.8	82.7	81.2	74.8	69.4	67.6	74.19
1828 ...	69.8	71.5	64.5	69.8	76.1	80.5	81.2	81.7	79.3	73.6	68.3	70.0	73.88
1829 ...	59.8	62.2	60.1	72.1	[77.0]	[80.0]	80.1	81.5	79.9	75.6	62.9	67.4	[71.75]
1830 ...	61.1	63.6	67.5	71.3	77.4	81.5	82.4	81.7	79.2	74.3	70.4	65.6	72.99
1831 ...	56.0	60.1	68.2	72.3	74.7	79.6	81.1	81.1	81.2	75.6	67.7	59.6	71.42
1832 ...	60.7	70.0	66.4	70.6	77.4	80.7	81.4	81.1	78.9	75.0	67.0	64.0	70.47
1833 ...	65.0	56.6	64.7	70.1	72.2	78.1	78.3	78.8	77.5	72.3	67.0	61.0	70.47

*Received too late for general discussion of weather for September, 1890.*

Interpolated values are given in brackets

*Mean temperature (degrees Fahr.) observed at Fort Howard, Wis., by assistant surgeons, U. S. Army.*

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
1822	13.2	21.4	34.9	41.2	61.2	66.5	72.4	69.6	59.2	43.5	36.3	9.4	44.1
1823	19.7	15.2	26.0	42.9	52.2	66.0	71.7	69.1	53.4	42.6	29.1	20.1	42.4
1824	24.4	18.0	28.5	42.2	53.5	65.1	73.1	67.9	59.5	42.5	30.5	27.2	44.4
1825	18.5	28.2	34.0	47.3	56.9	60.3	79.1	68.6	56.6	49.0	37.2	16.2	46.7
1826	19.2	18.6	29.4	39.5	62.4	67.9	70.7	68.2	57.3	50.9	36.3	20.9	45.1
1827	16.2	25.1	31.0	43.2	55.6	55.8	62.2	72.1	70.2	41.4	47.0	34.2	45.6
1828	19.0	23.5	36.6	41.8	56.8	69.7	69.8	69.7	55.3	48.4	34.6	24.6	45.8
1829	19.0	6.9	27.1	40.2	61.2	68.8	68.5	67.4	56.0	49.7	26.5	29.4	43.4
1830	14.0	24.5	33.2	51.6	54.5	64.6	75.7	68.8	57.0	54.1	43.0	20.8	46.8
1831	9.9	12.7	33.7	40.9	56.5	68.9	72.0	70.0	53.7	46.2	31.2	3.9	41.6
1832	16.7	9.3	34.5	47.2	54.0	68.4	71.6	66.5	58.5	49.9	[33.3]	[26.7]	44.7
1833	21.5	20.1	30.6	47.9	56.7	64.0	72.6	70.4	61.0	42.7	37.3	33.5	46.7
1834	11.6	31.8	33.0	48.8	58.5	63.5	75.2	71.2	58.5	46.7	39.9	26.5	46.9
1835	25.8	11.8	32.0	43.1	60.0	67.9	67.3	53.6	47.3	29.2	19.8	44.0	1838
1836	21.0	20.6	23.9	41.8	56.9	63.8	69.2	62.7	55.0	40.3	34.7	23.7	42.8
1837	24.2	23.5	25.6	38.0	48.0	62.3	67.7	64.7	56.9	45.6	39.7	26.4	43.5
1838	21.6	12.5	37.7	39.7	51.0	66.8	71.5	69.8	56.3	42.6	25.8	15.5	42.6
1839	24.1	25.3	30.2	52.9	53.9	61.1	71.3	65.3	55.5	54.3	32.1	27.2	46.1
1840	16.1	22.7	33.6	46.4	59.5	68.4	68.9	65.5	57.0	45.9	33.0	21.0	44.8
1849	21.8	23.4	29.0	37.8	50.1	66.8	70.9	68.0	56.3	47.3	34.7	17.8	43.7
1851	20.2	24.3	33.5	40.0	50.2	62.3	67.3	64.6	61.2	46.1	31.1	17.7	43.3
1852	15.6	21.8	27.4	54.8	54.8	64.0	71.5	69.9	57.2	46.7	34.2	21.1	44.5
Mean..	18.8	20.1	31.2	43.2	55.7	66.2	71.5	67.9	57.2	46.7	34.2	21.1	44.5

Interpolated values are given in brackets.

*Precipitation (inches and hundredths) observed at Fort Ripley, Minn., by assistant surgeons, U. S. Army.*

1850	1.36	0.91	1.05	2.67	1.52	6.00	11.92	2.51	1.77	1.45	3.65	0.51	35.32
1851	1.41	0.24	0.26	0.97	5.56	5.50	[4.34]	3.15	8.74	1.93	2.82	0.36	[35.28]
1852	0.13	0.42	6.61	2.37	3.96	2.10	3.92	1.37	6.40	1.27	3.10	2.87	34.52
1853	0.18	0.34	1.06	1.31	1.45	8.72	4.35	3.68	0.62	1.68	3.21	0.95	1.18
1854	0.67	0.03	0.79	0.97	4.34	3.68	0.62	1.68	4.40	0.91	0.24	0.15	18.49
1855	0.41	2.68	1.12	0.36	1.68	4.88	4.03	5.38	4.95	0.06	1.96	0.24	23.55
1856	0.28	0.01	4.88	2.01	3.81	4.53	2.11	1.36	3.86	0.72	1.68	0.24	25.33
1857	1.67	1.68	0.74	1.16	2.68	5.66	.....	.....	.....	0.00	0.46	.....	.....
1858	1.21	0.55	0.61	2.15	1.90	1.80	3.95	1.77	4.14	0.44	0.67	0.62	26.12
1859	0.57	0.50	4.49	1.44	5.85	4.00	0.66	1.65	3.87	0.35	2.10	0.52	26.00
1860	0.57	0.72	0.38	1.06	8.23	9.2	2.44	1.50	3.20	4.73	0.99	0.88	30.61
1861	1.10	1.95	0.65	2.80	5.10	4.11	1.89	5.88	3.04	2.36	3.13	0.41	32.42
1862	0.59	0.93	1.35	1.46	1.52	1.65	1.79	1.71	2.17	0.45	0.58	1.09	14.39
1863	0.72	0.50	0.29	0.61	1.89	0.28	0.60	5.47	4.32	1.97	0.31	0.24	17.20
1864	0.32	[0.93]	1.40	0.35	0.92	0.90	0.47	0.97	0.90	0.20	0.60	0.40	[12.36]
1865	0.01	1.26	1.40	2.05	1.25	2.27	4.34	6.50	3.72	[1.68]	0.34	[0.92]	[25.74]
1866	1.20	0.15	1.45	0.18	1.34	.....	1.34	1.96	0.02	.....	.....	.....	.....
1867	0.46	1.10	0.42	0.70	2.30	9.80	10.90	1.00	1.10	0.51	1.25	0.80	30.34
1868	1.30	2.15	1.15	2.10	2.60	0.85	6.02	6.43	3.95	1.80	3.50	0.35	32.20
1869	0.65	1.15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1870	1.57	2.48	1.86	0.54	4.30	[4.51]	[4.34]	[3.31]	4.22	1.11	0.34	0.54	[29.12]
1871	1.01	0.94	3.49	3.30	0.51	4.91	3.07	4.79	2.38	1.78	4.20	3.64	34.02
1872	0.07	0.71	1.28	1.54	4.35	3.81	6.82	4.10	3.92	2.19	3.64	1.34	34.77
1873	2.09	3.41	2.76	1.19	4.59	9.18	5.46	2.18	1.94	4.71	2.19	1.08	40.78
1874	0.83	0.80	2.00	0.62	2.31	9.30	[4.34]	8.20	2.17	2.25	2.50	2.36	[37.69]
1875	1.03	1.48	3.35	1.95	4.40	2.33	3.99	3.59	3.05	0.36	1.60	1.04	28.17
1876	0.54	0.94	1.16	1.14	4.10	2.43	1.74	2.60	1.86	1.04	1.29	0.62	19.46
1877	0.36	0.00	0.86	2.38	1.84	4.46	1.27	.....	.....	.....	.....	.....	.....
Mean..	0.85	0.92	1.56	1.62	3.01	4.34	4.06	3.30	3.29	1.60	1.72	0.91	27.18

\*For eleven days; post closed July 11, 1877. Interpolated values are given in brackets.

*Mean temperature (degrees Fahr.) observed at Fort Ripley, Minn., by U. S. Army surgeons.*

1849	7.9	13.0	20.3	32.5	51.0	63.8	66.2	57.8	56.8	43.0	37.3	4.9	.....
1850	9.2	14.5	31.3	39.8	48.0	60.0	[68.1]	61.6	60.0	43.4	24.3	7.4	[39.0]
1851	10.1	17.5	21.1	36.6	56.0	63.0	68.0	66.0	53.4	45.0	22.6	9.4	39.1
1852	13.6	7.1	22.5	43.8	52.0	62.9	65.7	66.3	56.5	41.4	24.2	15.7	39.3
1853	-2.1	10.9	27.3	45.6	52.1	64.0	68.9	61.8	58.6	48.3	29.5	18.2	40.3
1854	8.4	8.2	23.7	46.2	56.7	62.9	68.7	63.2	56.6	40.6	25.4	10.3	39.0
1855	-1.5	9.0	18.1	42.7	54.2	68.7	74.0	63.6	54.6	45.6	25.4	5.1	38.3
1856	-0.5	11.2	18.8	29.6	52.9	64.6	64.6	62.9	56.8	42.6	20.1	10.1	38.0
1857	18.0	7.6	34.2	41.3	53.7	71.8	71.6	68.8	56.9	44.3	24.8	12.0	42.1
1858	7.8	14.2	30.0	36.0	55.9	63.0	76.5	67.6	57.2	41.0	27.7	10.5	39.8
1859	9.6	14.0	34.9	42.4	57.6	60.0	70.7	65.0	52.6	43.9	26.8	10.9	41.2
1860	7.8	15.5	21.2	43.3	51.7	69.2	68.7	67.5	56.3	44.1	27.5	15.9	40.7
1861	7.8	15.5	21.2	43.3	51.7	69.2	68.7	67.5	56.3	44.1	27.5	15.9	40.7
1862	2.6	1.9	24.7	36.8	58.2	65.6	71.6	66.6	56.7	42.4	25.4	17.6	39.1
1863	14.5	11.7	25.4	49.2	59.4	66.1	69.0	64.2	54.9	37.1	27.6	18.0	41.4
1864	11.4	20.0	25.0	42.5	58.4	70.9	73.9	70.4	56.2	42.4	26.5	6.3	42.2
1865	9.7	18.9	19.2	40.0	56.4	66.3	[70.4]	68.3	55.7	43.3	24.8	10.5	41.8
1866	8.2	5.9	17.0	36.5	56.5	65.6	66.6	60.0	50.2	30.1	10.0	0.0	39.8
1867	6.4	9.8	11.7	40.6	48.0	66.5	69.4	67.7	57.3	44.1	30.0	9.2	38.6
1868	1.4	7.5	28.1	36.8	58.1	67.5	75.4	65.7	48.7	40.2	27.2	11.5	39.0
1869	1.3	13.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1870	4.7	5.4	24.2	47.4	63.4	[65.3]	[70.4]	[66.0]	60.6	41.2	33.7	15.5	[41.5]
1871	5.0	12.4	24.9	40.4	61.9	65.6	67.6	64.7	55.4	41.4	20.0	-0.1	38.3
1872	5.7	11.7	15.2	39.6	51.2</								

Table of miscellaneous meteorological data for September, 1890—Signal Service observations.

Stations and districts.	Elevation above sea-level, feet.	Temperature of air, in degrees Fahrenheit.										Wind.	Maximum velocity.	Cloudless days, 8 a.m. to 8 p.m.		Precipit'n data since opening of station.															
		Pressure, in inches.	Mean reduced.	Monthly range.	Mean actual.	Monthly mean.	Departure from normal.	Maximum.	Mean maximum.	Minimum.	Greatest daily range.			Mean minimum.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.	Miles per hour.	Date.	Cloudy days, 8 a.m. to 8 p.m.	Length of record, years.	Greatest for month.	Year.								
New England.																															
Eastport.	53	30.02	30.08	0.74	57.0	+ 1.0	73	62.4	37	51.5	27	2	50.4	83.0	4.86	+ 1.45	5.431	*	24	w.	30	8	71	15	12.5-54.5	18	6.53	1876	1.05	1887	
Green Mountains.	1,541	28.56	30.19	0.38	56.2	- 0.2	71	61.5	47	50.9	18	4	46.6	73.8	0.29	- 0.29	5.017	w.	46	s.	8	5	3	3	12.5-3.1	...	...	...	...		
Portland.	99	30.00	30.10	0.69	59.7	- 0.3	79	66.1	37	53.3	33	3	54.4	86.1	4.88	+ 1.98	5.166	s.	27	s.	13	11	13.5-55.5	20	8.22	1888	0.56	1884			
Manchester.	247	29.87	30.13	0.69	60.9	- 0.1	81	69.7	33	52.1	38	5	53.1	80.9	4.88	+ 1.98	2.948	n.w.	21	n.w.	18	11	13.5-64.8	4	8.58	1888	0.94	1887			
Mt. Washington.	6,279	23.93	30.12	0.67	41.0	- 0.1	60	46.1	18	36.0	20	3	37.4	87.6	9.31	- 0.20	20.645	n.w.	69	n.w.	30	5	7	18	21.3-38.8	20	15.23	1880	2.79	1877	
Northfield.	872	29.20	30.13	0.62	56.0	- 0.1	79	65.3	27	46.7	35	3	50.2	85.1	2.95	- 0.25	5.252	s.	32	ne.	18	3	13	14	16.8-4.4	9	6.27	1882	1.78	1887	
Boston.	125	30.00	30.13	0.72	62.9	- 0.1	83	69.6	39	56.2	29	4	54.9	79.0	4.89	+ 1.89	7.261	n.w.	34	s.	13	10	7	13	12.6-14.7	20	10.93	1882	0.31	1884	
Nantucket.	14	30.12	30.13	0.68	63.8	- 0.1	78	68.3	48	59.3	16	2	58.0	83.6	4.83	+ 1.88	6.926	s.	36	sw.	13	15	7	12	13.5-14.9	4	8.33	1890	1.99	1887	
Wood's Holl.	22	...	...	...	63.5	- 0.1	76	68.5	44	58.6	18	5	60.6	90.5	4.70	+ 2.27	9.926	s.	36	sw.	13	15	7	10	11	...	4	11.39	1888	0.28	1877
Vineyard Haven.	27	30.12	30.15	0.66	63.7	- 0.3	74	68.2	48	59.2	15	4	59.4	87.2	2.69	- 0.25	9.975	sw.	40	ne.	29	11	9	10	13.4-5.3	11	5.96	1882	0.62	1884	
Block Island.	22	...	...	...	64.2	+ 2.2	81	72.9	36	55.4	34	9	59.1	85.3	4.65	+ 2.00	9.933	n.w.	25	s.	13	13	9	14	13.5-4.8	18	13.43	1882	0.77	1885	
Marragansett Pier.	107	30.02	30.13	0.64	62.8	- 1.2	80	71.2	36	54.5	33	4	57.0	85.3	5.38	+ 1.89	3.933	n.w.	25	s.	13	13	6	12	15.6-0.5	20	8.99	1882	1.21	1877	
New Haven.	47	30.07	30.12	0.66	62.4	+ 0.2	78	70.4	40	58.0	27	3	57.4	81.8	5.51	+ 2.20	4.376	sw.	29	sw.	13	12	6	12	15.6-0.5	20	8.99	1882	1.21	1877	
Mid-Atlantic States.					68.1	- 0.7																									
Albany.	85	30.05	30.14	0.58	62.0	- 2.0	82	69.9	36	54.1	31	3	54.0	81.6	8.91	- 5.71	4.568	n.w.	24	w.	23	10	10	16.5-14.0	17	8.91	1890	1.80	1884		
New York City.	185	29.94	30.14	0.57	66.8	- 0.2	86	74.0	46	59.6	21	4	57.5	78.6	4.71	+ 4.93	6.534	s.	25	n.	8	6	13	11	11.5-26.1	20	14.51	1882	0.15	1884	
Harrisburg.	377	29.74	30.15	0.47	64.2	- 0.1	86	72.8	42	55.7	30	4	56.0	77.8	2.89	- 0.08	4.023	s.	24	n.	24	10	9	11	11.6-0.4	3	4.53	1880	2.89	1880	
Philadelphia.	117	30.03	30.15	0.50	67.2	- 1.8	88	74.8	45	59.6	25	4	57.8	78.4	2.31	- 0.98	6.713	sw.	36	nw.	24	9	7	14	11.5-8.4	20	12.09	1882	0.20	1884	
Atlantic City.	53	30.09	30.14	0.50	65.5	- 1.5	78	70.5	48	60.5	18	4	61.0	85.0	5.51	- 1.86	6.768	s.	35	ne.	29	8	13	12	12.4-14.7	17	7.14	1888	0.34	1884	
Baltimore.	76	30.04	30.13	0.44	68.4	- 0.6	87	75.9	46	60.9	25	5	59.0	76.6	4.76	- 1.08	3.386	ne.	18	s.	28	14	8	12	12.6-14.2	20	10.52	1876	0.09	1884	
Washington City.	112	30.02	30.14	0.43	67.8	- 1.2	87	76.0	44	59.5	28	4	56.9	68.1	4.22	+ 0.12	3.289	s.	24	nw.	20	8	11	11	11.6-9.4	20	10.81	1876	1.04	1884	
Cape Henry.	...	...	...	...	72.4	+ 0.4	91	78.2	58	66.5	22	6	79.8	78.3	4.94	- 1.28	2.974	c.	24	n.	29	4	12	13	12.7-25.4	20	10.69	1889	1.02	1872	
Lynchburgh.	685	29.41	30.13	0.41	72.0	- 0.0	90	78.6	47	61.3	29	7	59.8	78.3	4.94	- 1.35	4.941	ne.	25	w.	13	7	12	11	19.6-0.3	9	20	1890	1.31	1887	
Norfolk.	43	30.09	30.13	0.46	72.4	+ 0.4	92	78.6	59	66.1	20	3	60.5	84.0	6.64	+ 0.98	5.717	ne.	34	ne.	29	6	15	9	13	13.6-5.5	20	11.90	1887	0.17	1884
S. Atlantic States.					75.3	+ 0.6																									
Charlotte.	808	29.28	30.12	0.35	70.8	- 0.2	91	78.6	50	63.0	24	6	63.7	86.6	5.54	+ 2.79	3.264	ne.	18	ne.	25	10	6	14	18.6-7.4	6	8.25	1888	0.53	1879	
Hatteras.	11	30.09	30.11	0.39	75.8	- 1.1	84	80.0	67	71.0	13	5	70.0	83.7	9.63	+ 2.69	8.183	ne.	36	se.	20	16	12	12	15.4-13.7	17	15.41	1877	0.80	1887	
Kitty Hawk.	...	...	...	...	76.4	+ 3.4	92	83.1	62	69.8	23	5	73.9	89.1	3.99	- 1.19	3.63	sw.	63	ne.	20	16	12	17	16.5-16.5	5	4.08	1888	0.00	1887	
Raleigh.	388	29.71	30.12	0.38	71.0	- 0.1	89	78.8	51	63.2	23	4	64.2	85.4	3.11	- 0.19	3.490	ne.	24	nw.	16	7	15	12	15.5-6.5	4	10.88	1888	1.68	1887	
Southport.	...	...	...	...	75.9	+ 1.0	90	80.7	58	69.4	20	4	70.3	88.2	3.61	- 1.60	4.323	n.	35	so.	1	4	19	13	12.4-14.7	17	7.14	1888	0.52	1886	
Wilmington.	78	30.03	30.11	0.34	74.0	- 0.9	89	80.5	58	67.6	21	7	68.5	87.3	8.19	- 1.35	4.941	ne.	25	w.	13	7	12	11	19.6-0.3	9	20	1890	1.31	1887	
Charleston.	52	30.02	30.08	0.28	76.2	+ 2.2	92	82.4	58	70.1	19	6	70.4	87.6	11.89	+ 0.89	4.026	ne.	36	e.	25	4	13	12	12.3-2.5	4	11.89	1889	0.56	1887	
Columbia.	...	...	...	...	73.0	- 0.1	91	81.1	53	65.0	24	7	70.9	89.1	7.09	- 1.09	4.026	ne.	36	...	5	13	12	21	11	4	7.09	1890	0.56	1887	
Augusta.	183	29.94	30.11	0.31	75.1	- 0.9	94	83.3	56	66.9	24	6	67.4	88.0	8.91	- 5.38	2.157	ne.	15	ne.	28	4	16	18	17.3-7.2	20	8.91	1890	0.65	1886	
Savannah.	87	29.99	30.08	0.34	75.4	- 0.6	88	82.2	58	68.6	26	6	69.4	88.0	10.58	+ 1.15	3.491	se.	28	sw.	29	4	12	14	22.5-5.8	20	16.58	1890	1.64	1886	
Jacksonville.	43	30.06	30.06	0.32	79.1	+ 1.1	92	87.2	65	71.0	22	10	71.0	85.0	4.88	- 3.01	3.380	se.	28	sw.	25	7	18	5	20.2-5.4	4	1.95	1871	...	...	
Florida Peninsula.					76.6	- 0.9																									
Jupiter.	28	30.01	30.04	0.25	79.0	- 0.3	89	85.3	69	72.8	18	8	74.2	84.2	8.69	- 2.29	4.105	e.	30	e.	21	7	16	7	15	13.5-4.5	2	3.82	1888	6.15	1886
Key West.	22	30.01	30.03	0.23	80.3	- 2.7	89	80.2	70	74.4	17	7	73.8	79.7	16.14	+ 9.55	4.409	se.	37	ne.	16	4	14	12	23.7-1.3	6	16.14	1890	3.13	1876	
Micco r.	...	...	...	...	78.4	- 0.1	90	86.8	68	69.9	20	14	82.2	87.0	2.67	- 0.08	4.021	e.	...	...	26	1	6	2	8	...					

Table of miscellaneous meteorological data for September, 1890—Signal Service observations—Continued.

Stations and districts.	Elevation above sea-level, feet.	Pressure, in inches.		Temperature of air, in degrees Fahrenheit.						Wind.	Maximum velocity.	Cloudless days.	Partly cloudy days.	Precipitation data since opening of station.															
		Mean actual.	Mean reduced.	Monthly range.	Monthly mean.	Departure from normal.	Maximum.	Minimum.	Mean minimum.						Miles per hour.	S. a. m.	Average cloudiness, tenths.	S. p. m.	Length of record, years.	Greatest for month.	Last for month.	Year.							
<i>Extreme Northwest.</i>				65.3—1.3	54.6—1.4	86	67.3	30	41.9	44	8	45.0	78.9	2.62+	0.51	8, 163; s.	36	se.	16	6	8	8.3—5.4—4.9	10	6.27	1889	0.30	1887		
Moorhead	935	29.00	30.01	1.04	54.6—1.4	86	67.3	30	41.9	44	8	45.0	78.9	2.62+	0.51	8, 163; s.	36	nw.	7	5	10	9	11.3—8.5—9	11	3.82	1890	0.45	1887	
Saint Vincent	804	29.13	30.02	0.91	51.3—1.7	82	63.2	29	39.4	41	5	39.2	74.8	3.82+	1.00	7, 051; se.	42	nw.	18	22	2	8	10.4—0.3—8	12	5.61	1876	0.04	1883	
Bismarck	1,681	28.22	30.02	0.92	56.4—0.6	88	70.5	26	42.2	45	6	46.0	79.2	0.98	0.27	7, 513; nw.	34	nw.	18	6	16	8	13.5—6.4—8	12	2.86	1882	0.00	1879	
Fort Buford	1,900	27.98	30.00	0.65	55.4—0.6	91	69.0	29	41.8	46	5	39.8	86.6	2.05+	1.32	6, 143; e.	34	nw.	11	14	5	7	11.5—6.4—8	8	1.56	1884	0.04	1883	
Fort Yates				59.0—2.0	92	75.5	27	42.4	44	16	.....	.....	0.70	0.16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
<i>Upper Miss. Valley.</i>				61.8—3.8	52	75.5	27	42.4	44	16	.....	.....	2.78—1.04	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Saint Paul	831	29.16	30.05	0.91	58.2—1.8	84	68.8	31	47.5	52	8	47.0	73.6	2.73+	0.71	4, 837; se.	26	nw.	19	14	4	12	10.4—3.4—7	20	9.95	1881	0.27	1883	
La Crosse	736	29.32	30.12	0.84	58.2—3.8	88	69.5	31	46.8	34	6	48.7	77.2	5.20+	0.25	3, 897; se.	30	nw.	19	16	3	11	9.3—8.4—4	18	10.87	1881	1.32	1883	
Davenport	613	29.45	30.10	0.80	61.8—3.2	90	72.1	37	51.4	33	7	48.0	67.8	2.34	1.08	4, 624; no.	36	nw.	18	12	2	6	9.5—2.4—5	13	7.86	1874	0.30	1871	
Des Moines	869	29.17	30.09	0.78	61.0—4.0	89	72.3	33	49.7	35	8	49.2	73.1	1.57	2.47	4, 584; s.	35	sw.	18	13	9	8	7.5—5.4—2	13	7.93	1886	0.15	1883	
Dubuque	651	29.41	30.12	0.90	59.8—3.2	90	70.4	36	49.3	33	6	51.8	88.2; S.	3.72	1.21	2, 668; nw.	22	nw.	19	11	12	7	9.4—2.3—6	18	1.58	1881	0.67	1877	
Keokuk	613	29.46	30.11	0.74	62.7—4.3	92	73.1	36	52.3	32	10	51.3	72.4	4.46	0.82	3, 692; no.	36	nw.	18	13	9	8	8.4—3.4—1	20	11.08	1876	0.84	1871	
Cairo	359	29.70	30.08	0.38	66.5—4.5	87	73.0	45	60.0	24	2	59.0	84.8	2.27	0.35	4, 671; se.	34	n.	13	7	8	15	16.6—5.5—3	15	5.02	1884	0.16	1875	
Springfield, Ill.	644	29.41	30.10	0.57	62.7—4.3	91	73.2	39	52.2	32	8	51.0	73.1	1.99	2.83	5, 977; he.	32	w.	7	8	14	8	8.5—6.5—4	12	2.24	1886	0.84	1879	
Saint Louis	571	29.52	30.13	0.41	65.0—5.0	92	72.9	41	57.2	27	5	54.2	73.0	1.80	1.74	6, 851; se.	34	nw.	13	12	12	10	5.2—4.9	20	9.60	1886	0.01	1883	
<i>Missouri Valley.</i>				62.3—1.9	52	75.5	27	54	52.3	27	1	6.7	—0.76	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Columbia				63.5—3.5	50	75.3	34	51.7	35	7	58.0	85.8	3.97	.....	3, 895; ne.	24	nw.	12	8	10	12	7—5.1	2	3.97	1890	3.75	1889		
Kansas City	963	29.07	30.09	0.67	63.2—3.5	87	72.6	39	53.9	31	5	53.6	77.8	3.85	.....	4, 089; ne.	38	nw.	18	6	16	8	9.5—3.5—6	3	0.26	1888	0.26	1888	
Springfield, Mo.	1,356	28.65	30.07	0.45	63.4—3.4	87	71.0	36	55.7	28	6	56.6	86.6	8.11	.....	5, 899; ne.	48	nw.	18	6	11	13	15.5—8.5—2	4	8.11	1890	1.80	1888	
Leavenworth	842	29.20	30.09	0.70	64.0—4.0	88	74.0	37	53.9	31	3	54.2	78.3	3.81	0.18	3, 772; s.	36	nw.	18	4	10	10	9—4.8—3	20	7.65	1885	0.84	1888	
Topeka				64.0—4.0	92	75.7	36	52.3	30	4	52.0	75.7	2.50	1.02	5, 061; se.	34	nw.	18	11	13	7	7.4—0.4—4	10	8.36	1881	0.24	1888		
Omaha	1,113	28.91	30.10	0.82	62.7—3.3	84	73.0	36	52.4	31	8	49.6	69.9	3.25	0.50	1.02	5, 061; se.	34	n.	10	11	11	9	9.0—4.4—4	10	4.67	1887	0.57	1888
Crete				63.8—3.8	56	74.0	36	52.4	31	4	49.6	69.9	3.25	0.50	1.02	5, 061; se.	34	n.	10	11	11	9	9.0—4.4—4	10	8.36	1881	0.24	1888	
Valentine	2,613	27.34	30.03	0.75	61.9—1.9	92	76.6	27	47.2	46	10	43.8	86.3	6.08	0.91	7, 750; s.	40	nw.	18	12	11	7	4.0—0.3—0	10	4.28	1887	0.15	1888	
Sioux City	1,158	28.83	30.05	0.89	61.8—1.8	89	74.0	34	49.6	38	9	47.0	67.2	2.36	0.57	5, 970; s.	38	s.	11	11	11	8	7.3—3.0—0	2	2.23	1886	0.66	1888	
Fort Sully	1,600	28.30	29.99	0.87	61.0—1.0	93	75.0	33	46.9	48	6	42.7	60.6	1.54	0.48	7, 373; s.	40	nw.	18	15	15	6	5.4—3.8—2	15	4.09	1876	0.07	1873	
Huron	1,307	28.62	30.02	0.93	60.2—0.2	94	75.7	25	44.6	48	15	41.0	60.4	0.32	1.29	8, 767; s.	38	nw.	18	16	10	4	3.3—2.8—0	15	3.89	1889	0.15	1887	
Yankton	1,232	28.73	30.02	0.93	62.4—0.9	93	75.3	33	49.4	44	10	46.8	65.0	1.16	0.19	2.02	6, 937; se.	40	nw.	18	16	12	2	7.3—0.3—5	18	8.61	1881	0.07	1883
<i>Northern Slope.</i>				62.2—0.2	58	75.2	33	49.4	44	10	46.8	65.0	0.85	0.33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Ft. Assiniboine	2,660	27.29	30.01	0.59	55.6—1.6	87	68.8	26	42.5	44	4	38	62.6	1.87	0.58	7, 372; sw.	36	n.	17	13	6	11	8.5—1.4—8	11	2.69	1884	0.17	1885	
Fort Custer	3,040	26.86	29.98	0.69	58.4—0.4	88	74.5—0.5	32	42.3	46	9	36	85.6	1.72	0.95	4, 553; sw.	37	n.	15	12	12	1	6.5—3.2—6	12	1.72	1890	0.03	1879	
Helena	4,069	25.91	30.04	0.46	57.4—0.4	84	69.8	26	45.0	39	9	27	61.4	1.6	0.58	0.01	4, 511; sw.	36	w.	18	13	8	9	6.4—2.4—7	10	3.66	1882	0.00	1880
Rapid City	3,280	26.66	29.99	0.76	59.7—1.2	92	73.6	32	45.7	45	8	35	24.6	0.75	0.23	0.18	5, 185; s.	35	w.	19	13	13	6	4.3—5.3—6	5	1.45	1881	0.02	1888
Cheyenne	5,165	24.10	30.02	0.51	56.8—1.2	84	72.2	28	41.4	46	10	22	88.4—0	1.41	0.91	7, 096; nw.	40	w.	5	9	15	6	0.3—6.4—8	20	2.02	1877	0.00	1880	
Fort McKinney	4,244	29.95	29.92	0.21	59.1—0.9	84	71.0	22	47.2	48	9	32	4.43—0.01	0.01	7.27	6, 270; nw.	50	nw.	0	15	12	3	1.77	1889	T.	1888	0.00	1888	
Fort Washakie	5,580	24.53	30.02	0.68	56.0—0.5	83	72.7	24	39.4	47	8	30	42.6	0.40	0.40	0.01	3, 774; sw.	36	n.	11	10	9	8	4.0—3.4—2	16	5.43	1887	0.14	1886
North Platte	2,841	27.14	30.06	0.75	63.0—0.0	96	79.7	30	46.3	45	16	43.6	60.6	0.19	1.44	0.16	0.61—1.39	37	nw.	18	11	15	4	3.4—0.3—4	16	5.10	1887	0.08	1884
<i>Middle Slope.</i>				64.7—2.0	50	75.2	32	44.9	45	14	33.6	45.4	0.17	0.06	0.01	0.01	0.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado Springs				50.7—0.5	86	74.5	32	44.9	45	14	33.6	45.4	0.17	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Denver	5,281	24.85	30.01	0.59	57.8—0.5	87	77.8	34	47.2	45	11	31	2.40—0.0	0.															